BBA

Gene Structure and Expression

Vol. 1216, 1993

Cumulative Contents

Editorial vii

Information for Contributors ix

Regular Papers

Rapid determination of the affinity of 28- and 14-mer phosphorothioate oligonucleotides for HIV-1 reverse transcriptase by fluorescence spectroscopy
G. Maury, G. Divita, F. Morvan, J.-L. Imbach and R.S. Goody (France, Germany) 1

Molecular cloning of two novel protein kinase genes from *Arabidopsis thaliana*
T.V. Moran and J.C. Walker (USA) 9

Ubiquitous factors that interact simultaneously with two distinct *cis*-elements on the rat aldolase B gene promoter
T. Yabuki, S.-i. Ejiri and K.-i. Tsutsumi (Japan) 15

Pausing by retroviral DNA polymerases promotes strand transfer from internal regions of RNA donor templates to homopolymeric acceptor templates
R.G. Buiser, R.A. Bambara and P.J. Fay (USA) 20

Distribution and properties of major ribosome-inactivating proteins (28 S rRNA *N*-glycosidases) of the plant *Saponaria officinalis* L. (Caryophyllaceae)
J.M. Ferreras, L. Barbieri, T. Girbés, M.G. Battelli, M.A. Rojo, F.J. Arias, M.A. Rocher, F. Soriano, E. Mendéz and F. Stirpe (Italy, Spain) 31

Purification and partial characterization of single-chain ribosome-inactivating proteins from the seeds of *Phytolacca dioica* L.
A. Parente, P. De Luca, A. Bolognesi, L. Barbieri, M.G. Battelli, A. Abbondanza, M.J.W. Sande, G.S. Gigliano, P.L. Tazzari and F. Stirpe (Italy) 43

DNA hypomethylation and differentiation in Friend leukemia cell variants
F. Palitti, D. Carotti, V. Busiello, A. Bendicenti, R. Strom and M. Di Girolamo (Italy) 50

Analysis of regulatory elements flanking metallothionein genes in Cd-tolerant fish (pike and stone loach)
P. Kille, J. Kay and G.E. Sweeney (UK) 55

Molecular cloning of cDNAs for two *Xenopus* proteasome subunits and their expression in adult tissues
G. Fujii, K. Tashiro, Y. Emori, K. Saigo and K. Shiokawa (Japan) 65

Initiator sequences direct downstream promoter binding by human transcription factor IID
J.C. Wang and M.W. Van Dyke (USA) 73

Molecular cloning and bacterial expression of cDNA for rat calpain II 80 kDa subunit
C.I. DeLuca, P.L. Davies, J.A. Samis and J.S. Elce (Canada) 81

An AP-1 binding site in the upstream region of *DEB-A* is part of a developmentally regulated negative element
G.L. Wang and E.S. Goldstein (USA) 94

Rapid Report

Bidirectional transcription from actin promoters in *Dictyostelium*
D. Knecht, H. Kern and C. Scherczinger (USA) 105

Short Sequence Papers

The primary structure of two proteins from the large ribosomal subunit of rice
R. Nishi, S.-i. Kidou, H. Uchimiya and A. Kato (Japan) 110

The primary structure of two proteins from the small ribosomal subunit of rice
R. Nishi, H. Hashimoto, H. Uchimiya and A. Kato (Japan) 113

Nucleotide sequence of the *Lactococcus lactis* NCDO 763 (ML3) *rpoD* gene
X. Gansel, A. Hartke, P. Boutibonnes and Y. Auffray (France) 115

Molecular cloning and sequence analysis of U3 snoRNA-associated mouse fibrillarin
S.J. Turley, E.M. Tan and K.M. Pollard (USA) 119

Sequence and expression of a gene encoding a protein with RNA-binding and glycine-rich domains in *Brassica napus*
D. Bergeron, D. Beauseigle and G. Bellemare (Canada) 123

cDNA sequence for mouse caltractin
K. Ogawa and T. Shimizu (Japan) 126

continued

A highly conserved repetitive sequence from *Physarum polycephalum* contains nucleotide arrangements similar to replicator sequences
L. Kruse, G. Meyer and A. Hildebrandt (Germany) 129

Nucleotide and deduced amino acid sequence of human ribosomal protein L18
M. Puder, G.F. Barnard, R.J. Staniunas, G.D. Steele, Jr. and L.B. Chen (USA) 134

Clusters of 5S rRNAs in the intergenic region of ubiquitin genes in *Tetrahymena pyriformis*
P. Guerreiro, A. Neves and C. Rodrigues-Pousada (Portugal) 137

Dbp45A encodes a *Drosophila* DEAD box protein with similarity to a putative yeast helicase involved in ribosome assembly
C.A. Lavoie, M. Harvey and P.F. Lasko (Canada) 140

The human and bovine 14-3-3η protein mRNAs are highly conserved in both their translated and untranslated regions
K.D. Swanson, M.S. Dhar and J.G. Joshi (USA) 145

Characterization of cDNAs encoding the rat testis-specific E1α subunit of the pyruvate dehydrogenase complex: comparison of expression of the corresponding mRNA with that of the somatic E1α subunit
T.E. Cullingford, J.B. Clark and I.R. Phillips (UK) 149

The complete cDNA coding sequence for the mouse CDEI binding protein
J. Hanes, H. Von der Kammer, G.I. Kristjansson and K.H. Scheit (Germany) 154

Cloning and sequence analysis of a murine cDNA encoding glutamate decarboxylase (GAD65)
D.S. Lee, J. Tian, T. Phan and D.L. Kaufman (USA) 157

Cloning and characterization of a glutamate transporter cDNA from human cerebellum
P. Shashidharan and A. Plaitakis (USA) 161

The cloning of eggplant seedling cDNAs encoding proteins from a novel cytochrome *P*-450 family (CYP76)
T. Toguri, O. Kobayashi and N. Umemoto (Japan) 165

Cloning of cDNA for the β-subunit of rabbit translation initiation factor-2 using PCR
N.T. Price, L. Hall and C.G. Proud (UK) 170

Corrigendum 173

Review

Macromolecular crowding effects on macromolecular interactions: some implications for genome structure and function
S.B. Zimmerman (USA) 175

Regular Papers

Transcriptional activation of Mn-superoxide dismutase gene (*sodA*) of *Escherichia coli* by $MnCl_2$
L.W. Schrum and H.M. Hassan (USA) 186

The distribution of DNA topoisomerase II isoforms in differentiated adult mouse tissues
J.E.M. Juenke and J.A. Holden (USA) 191

Identification of proximal and distal regulatory elements of the rat connexin32 gene
S. Bai, D.C. Spray and R.D. Burk (USA) 197

Stabilization of a protein-tyrosine phosphatase mRNA upon mitogenic stimulation of T-lymphocytes
G.V. Rajendrakumar, V. Radha and G. Swarup (India) 205

ATP-independent DNA topoisomerase from *Fervidobacterium islandicum*
C. Bouthier de la Tour, C. Portemer, P. Forterre, R. Huber and M. Duguet (France, Germany) 213

The *Arabidopsis thaliana* ribosomal protein S15 (*rig*) gene
V. Sangwan, T.R. Lenvik and J.S. Gantt (USA) 221

Analysis of the mRNA structure of the *Pseudomonas putida* TOL *meta* fission pathway operon around the transcription initiation point, the *xyl*TE and the *xyl*FJ regions
S. Marqués, J.L. Ramos and K.N. Timmis (Germany, Spain) 227

Molecular cloning of guinea pig CYP1A1: complete primary structure and fast mobility of expressed protein on electrophoresis
S. Ohgiya, K. Ishizaki and N. Shinriki (Japan) 237

Primary structure and lens-specific expression of genes for an intermediate filament protein and a β-tubulin in cephalopods
S.I. Tomarev, R.D. Zinovieva and J. Piatigorsky (USA, Russia) 245

Cloning and sequence analysis of the gene and cDNA encoding mouse spermidine/spermine N^1-acetyltransferase – a gene uniquely regulated by polyamines and their analogs
M. Fogel-Petrovic, D.L. Kramer, B. Ganis, R.A. Casero Jr. and C.W. Porter (USA) 255

Evidence for a salt-induced conformational transition in UV-irradiated superhelical PM2 DNA
C.A. Peterson, D.M. Gray, H.B. Gray, Jr. and R.J. Legerski (USA) 265

Transcriptional regulation of the N-*myc* gene: identification of positive regulatory element and its double- and single-stranded DNA binding proteins

Y. Imamura, T. Nakagawa, S.M.M. Iguchi-Ariga and H. Ariga (Japan) 273

Rapid Report

Heat shock and osmotically dependent steps by DNA uptake after *Escherichia coli* electroporation
P.A. Antonov, V.A. Maximova and R.P. Pancheva (Bulgaria) 286

Short Sequence-Papers

Structure of the human progesterone receptor gene
M. Misrahi, P.-Y. Venencie, P. Saugier-Veber, S. Sar, P. Dessen and E. Milgrom (France) 289

Molecular cloning of a cDNA encoding human histidase
M. Suchi, N. Harada, Y. Wada and Y. Takagi (Japan) 293

Cloning and sequence of a chicken α-*N*-acetylgalactosaminidase gene
M.O. Davis, D.J. Hata, D. Smith and J.C. Walker (USA) 296

Molecular cloning and characterization of cDNA encoding mouse hepatocyte growth factor
Y. Liu, G.K. Michalopoulos and R. Zarnegar (USA) 299

Cloning and sequence analysis of a full length cDNA encoding human mitochodrial 3-oxoacyl-CoA thiolase
H. Abe, A. Ohtake, S. Yamamoto, Y. Satoh, M. Takayanagi, Y. Amaya, M. Takiguchi, H. Sakuraba, Y. Suzuki, M. Mori and H. Niimi (Japan) 304

Nucleotide sequence of the *Escherichia coli* K-12 transketolase (*tkt*) gene
G.A. Sprenger (Germany) 307

Structure and expression of the mouse testicular H1 histone gene (H1t)
B. Drabent, C. Bode and D. Doenecke (Germany) 311

A B cell specific immediate early human gene is located on chromosome band 1q31 and encodes an α helical basic phosphoprotein
J.S. Newton, R.W. Deed, E.L.D. Mitchell, J.J. Murphy and J.D. Norton (UK) 314

Sequence of a complete murine cDNA reflecting an S phase-prevalent transcript encoding a protein with two types of nucleic acid binding motifs
G. Schmidt and D. Werner (Germany) 317

Cloning a cDNA from human NK/T cells which codes for an unusual leucine zipper containing protein
B. Dixon, B. Sahely, L. Liu and B. Pohajdak (Canada) 321

Sequence of the *PAS8* gene, the product of which is essential for biogenesis of peroxisomes in *Saccharomyces cerevisiae*
T. Voorn-Brouwer, I. Van der Leij, W. Hemrika, B. Distel and H.F. Tabak (Netherlands) 325

The pancreatitis associated protein III (PAP III), a new member of the PAP gene family
J.-M. Frigerio, N.J. Dusetti, P. Garrido, J.-C. Dagorn and J.L. Iovanna (France) 329

Nucleotide sequence of class-α glutathione *S*-transferases from chicken liver
L.-F. Liu, S.-H. Wu and M.F. Tam (Taiwan, R.O.C.) 332

Nucleotide sequence of the genes encoding the L3, L4 and L23 equivalent ribosomal proteins from the archaebacterium *Halobacterium halobium*
Y. Yuki, R. Kanechika and T. Itoh (Japan) 335

DR-78, a novel *Drosophila melanogaster* genomic DNA fragment highly homologous to the DNA-binding domain of thyroid hormone-retinoic acid-vitamin D receptor subfamily
E. Martín-Blanco and T.B. Kornberg (USA) 339

Cloning of LL5, a novel protein encoding cDNA from a rat pituitary library
L. Levi, I. Hanukoglu, M. Raikhinstein, F. Kohen and Y. Koch (Israel) 342

Review

The hammerhead RNA domain, a model ribozyme
J. Bratty, P. Chartrand, G. Ferbeyre and R. Cedergren (Canada) 345

Regular Papers

Human dihydrolipoamide succinyltransferase: cDNA cloning and localization on chromosome 14q24.2–q24.3
K. Nakano, S. Matuda, T. Sakamoto, C. Takase, S. Nakagawa, S. Ohta, T. Ariyama, J. Inazawa, T. Abe and T. Miyata (Japan) 360

Chemical synthesis and expression of a gene coding for human muscle acylphosphatase
A. Modesti, G. Raugei, N. Taddei, R. Marzocchini, M. Vecchi, G. Camici, G. Manao and G. Ramponi (Italy) 369

Identification of the 5′ regulatory elements of avian lipoprotein lipase gene: synergistic effect of multiple factors
S.-C. Lu and A. Bensadoun (USA) 375

continued

Sequence and organization of the human vitamin D-binding protein gene
A. Braun, A. Kofler, S. Morawietz and H. Cleve (Germany) 385

Ro RNP associated Y RNAs are highly conserved among mammals
G.J.M. Pruijn, P.A.E.T.M. Wingens, S.L.M. Peters, J.P.H. Thijssen and W.J. Van Venrooij (The Netherlands) 395

Expression of serum amyloid A genes in mink during induction of inflammation and amyloidosis
M. Rygg, K. Nordstoga, G. Husby and G. Marhaug (Norway) 402

Characterization of regulatory sequences and nuclear factors that function in cooperation with the promoter of the human thymidylate synthase gene
N. Horie, M. Chimoto, R. Nozawa and K. Takeishi (Japan) 409

Over-expression of the yeast multifunctional *arom* protein
L.D. Graham, F.M. Gillies and J.R. Coggins (UK) 417

Co-expression of mutant and normal human insulin receptors in COS 7 cells
H. Maegawa, A. Kashiwagi, T. Haruta, K. Egawa, S. Ugi, R. Tachikawa-Ide, M. Hasegawa, M. Kobayashi and Y. Shigeta (Japan) 425

Expression and characterization of recombinant mouse mastocytoma histidine decarboxylase
J. Yamamoto, T. Fukui, K. Suzuki, S. Tanaka, K. Yatsunami and A. Ichikawa (Japan) 431

Induction of chicken avidin and related mRNAs after bacterial infection
T.A. Kunnas, M.J. Wallén and M.S. Kulomaa (Finland) 441

The structure of the human thyroxine binding globulin (TBG) gene
M.T. Akbari, A. Kapadi, M.J. Farmer, N.J.S. Fitch, K.P. McCann, S. Kordestani, I.L. Flink, M.C. Sheppard and D.B. Ramsden (UK, USA) 446

Polyamines modulate streptomycin-induced mistranslation in *Escherichia coli*
H.G. Nastri, I.G. Fastame and I.D. Algranati (Argentina) 455

Tissue specific and developmental expression of rat long- and medium-chain acyl-CoA dehydrogenases
B.E. Hainline, D.J. Kahlenbeck, J. Grant and A.W. Strauss (USA) 460

Short Sequence-Papers

Genomic sequence of mouse COL1A1 encoding the collagen propeptides
S.P. Fenton, S.R. Lamande, M. Hannagan, A. Stacey, R. Jaenisch and J.F. Bateman (Australia, USA) 469

Human ribosomal protein L4: cloning and sequencing of the cDNA and primary structure of the protein
C. Bagni, P. Mariottini, F. Annesi and F. Amaldi (Italy) 475

Cloning and sequencing of porcine moesin and radixin cDNA and identification of highly conserved domains
W.T. Lankes, R. Schwartz-Albiez and H. Furthmayr (USA, Germany) 479

Cloning and sequence analysis of cDNA encoding the bovine testis-derived male-enhanced antigen (*Mea*)
M. Kondo, S. Sato and S. Sutou (Japan) 483

Nucleotide sequence of the gene coding for *Clostridium botulinum* (*Clostridium argentinense*) type G neurotoxin: genealogical comparison with other clostridial neurotoxins
K. Campbell, M.D. Collins and A.K. East (UK) 487

Molecular cloning and sequencing of rat Max cDNA: castration-induced expression of the 2 kb transcript in male accessory sex organs of rats
M. Izawa (Japan) 492

An archaeal *trkA* homolog near *dnaK* and *dnaJ*
A.J.L. Macario, C.B. Dugan and E. Conway de Macario (USA) 495

Molecular cloning and analysis of the expression of the E1β subunit of branched chain α-keto-acid dehydrogenase in mice
J.M. Chinsky and P.A. Costeas (USA) 499

Regular Paper

A heritable point mutation in an extracellular domain of the TSH receptor involved in the interaction with Graves' immunoglobulins
U.R.M. Bohr, M. Behr and U. Loos (Germany) 504

Corrigendum 509

Cumulative Contents, Vol. 1216 511

Author Index 515